

6 DIGITAL MEDIA PROTECTION		Page 1 of 2
Department of Forensic Science Digital Evidence Procedures Manual		Amendment Designator:
		Effective Date: 22-January-2008
<p style="text-align: center;">6 DIGITAL MEDIA PROTECTION</p> <p>6.1 Purpose</p> <p>To preserve the integrity and prevent alterations or loss of data contained on removable digital storage media.</p> <p>6.2 Scope</p> <p>This procedure applies to removable digital storage media including, but not limited to, compact flash cards, PCMCIA cards I & II, SDI cards, smart media, memory sticks, floppy diskettes, Iomega Zip and Jaz disks, Compact discs (CD), Digital versatile discs (DVD), Mini digital versatile discs, DVR's, PC-based DVR's, cell phones, PC's, laptops, and digital cameras.</p> <p>6.3 Materials - Hardware/Software</p> <p>Equipment may include some or all of the following, as determined by the examiner, based on the evidence submitted and the specific analysis requested.</p> <ul style="list-style-type: none"> • Workstation • Write blocker (i.e. Digital Intelligence, Logicube, I-Look) • DVD and/or CD read-only drive(s) • Normal tools • Flashlight <p>6.4 Limitations</p> <p>None for this procedure</p> <p>6.5 Safety</p> <p>None for this procedure</p> <p>6.6 Procedures</p> <p>6.6.1 Ensure that the preliminary examination has been performed.</p> <p>6.6.2 Ensure that all necessary components/peripherals are enclosed with the evidence; if not, determine what is necessary and contact the Investigator.</p> <p>6.6.3 Determine if the type of evidence and request exceeds the scope of the Laboratory. If it is determined that the type of evidence and request does not exceed the scope, proceed with the analysis.</p> <p style="padding-left: 40px;">6.6.3.1 Floppy diskettes, MD formatted Minidisks and some memory sticks will typically have a built-in mechanism such as a switch or tab that can be enabled to render it as "read-only". Verify that the media is in "read-only" mode; if not, enable it. All data contained on the media should be immediately copied to the workstation.</p> <p style="padding-left: 40px;">6.6.3.2 CD's and DVD's must be viewed/played back using a read-only drive. As determined by the examiner, all applicable files contained on the disc should be immediately copied to the workstation. If this is not possible, hardware may be utilized to preserve the integrity of the data.</p>		

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<div data-bbox="248 291 1549 600"> <p>6.6.4 Remove the digital media from the computer/recording device if necessary, using the proper tools.</p> <p>6.6.5 Ensure that the media is properly labeled.</p> <p>6.6.6 The bit stream copy/duplicate will be used for the analysis; however, in some cases if a bit stream copy/duplicate could not successfully be produced or only the original evidence will work in the playback device, the original hard drive may need to be used for analysis. When possible, utilize a write blocker prior to examination.</p> <p>6.6.7 A hash algorithm will be performed on the digital media before and after the copy/duplicate to ensure the integrity of the evidence is intact. The results will be printed out and placed in the case file notes.</p> </div> <div data-bbox="151 630 371 659"> <p>6.7 References</p> </div> <div data-bbox="248 688 1549 1117"> <p>Owner's Manuals, User's Manuals and vendor specific manuals should be referenced for equipment instructions.</p> <p>Manufacturer's websites</p> <p>Logicube Desktop Write Protect User's Manual.</p> <p>Digital Intelligence User's Manual.</p> <p>Kruse, Warren G., and Jay G. Heiser. <u>Computer Forensics Incident Response Essentials</u>. Boston: Addison-Wesley, 2002.</p> <p><u>Electronic Crime Scene Investigation a Guide for First Responders</u>. Washington, D.C.: U.S. Department of Justice, 2001.</p> <p><u>Best Practices for Seizing Electronic Evidence a Pocket Guide for First Responders</u>. 3rd ed. Washington, D.C.: U.S. Department of Homeland Security, United States Secret Service.</p> </div> <div data-bbox="1482 1119 1549 1148"> <p align="right">◆End</p> </div>	